

Initial Questions for SAWS

Before:

1. Did SAWS have any advance warning that rolling outages would knock water pumping stations offline? Did SAWS agree or consent to these facilities being blacked out or were these downed facilities accounted for in previously established emergency protocols? (What prior agreements dictate conduct between SAWS and CPSE in emergency instances like this and were these agreements executed as planned?)
2. Did SAWS have any opportunity in this instance to give advance warning to neighbor's to stock up on water before outages occurred? Why or why not?
3. SAWS primary messaging before the winter event was related to protecting the 3 Ps (plants, pipes, pets). In retrospect, with the information that leadership had about the potential severity of the weather prior to the weekend, was this messaging sufficient or were there other key messages that should have been conveyed to customers?
4. When did SAWS start communicating to the public about the inclement weather and what to do with their pipes?
5. What preventative steps has SAWS taken prior to this event to protect infrastructure from freezing temperatures?
6. What preventative steps has SAWS taken prior to this event to protect infrastructure from power outages?
7. What coordination, if any, was there between SAWS and CPSE in anticipation of this winter emergency? Was there any discussion of the potential of downed infrastructure prior to the ERCOT demand to shed load?
8. Was SAWS aware there was a Hazard Mitigation Action Plan published in 2015? What actions were taken as a result of the study?
9. In that report, a Winter Storm is categorized as a **Highly Likely** event with a **Minor Severity**. This means that it was projected to occur within the next year with an impact that includes complete shutdown of critical facilities for more than one week. Given this prognostication, why did we still have water failure?
10. Does SAWS maintain an in-house plan or set of protocols similar to the Hazard Mitigation Action Plan?
 - A. To what extent was that plan activated in response to the winter storm and resulting outages?
 - B. Was the plan faithfully implemented? If not, why not?

C. To what extent are the SAWS plan or protocols' implementation dependent on CPSE?
Is SAWS in control of this or not?

During:

1. How did SAWS communicate throughout the emergency with the public?
2. What SAWS infrastructure and functionality was impacted during the event and how does SAWS attribute the causality of each instance of service failure?
3. Which factors that led to disruption of service were in SAWS' control and which factors were out of SAWS' control?
4. What direct message systems does SAWS have to provide updates to customers? Were all channels utilized and key messages shared in a timely manner?
5. Why was there a delay in reporting the failure of pump stations and calling a boil water notice (in compliance with TCEQ requirements). A senior SAWS official noted that the delayed reporting of this information to the public was related to national security concerns. What is the merit of this claim? If it is warranted, how can we better balance the managing of security interests with the need to communicate essential information to the public?
6. In respect to SAWS pumping stations shutting down:
 1. Did SAWS have the option to not shut off power to their pump stations or was it forced to do so by CPSE?
 2. Did SAWS lose ability to pump water before the power outages?
 3. Is there prior understanding between utility providers that rolling outages may impact pumping stations?
 4. If power was shut off by CPSE, was this shutoff done manually or by an automatic system?
 5. How much of the pump station issues were caused by power outages versus failing instruments due to freezing conditions?
7. How were the decisions made to bring the various parts of the system back online?
8. What areas of the city had the longest periods without water?
9. Can we see a map of the parts of the city that had no water and the parts that never lost water?
10. Can we see a map of the water distribution system?
11. How long were most people without water due to the storm, and how long were people without water due to their pipes bursting?
12. To what extent were water shortages attributed to pumping stations not being powered?
13. To what extent were water shortages attributed to SAWS' frozen pipes or equipment?
14. To what extent were water shortages attributed to residential or commercial frozen pipes and what could have been done to prevent them from freezing?
15. Why did SAWS pump more water during the storm vs. pre-storm, and how much did that pumping cost?
16. The Hazard Mitigation Action Plan addresses fires and frozen hydrants, was this an issue for SAWS?

17. Which areas were most heavily hit by the water pressure / service issues due to the downed pumping stations?
18. When did the plan to open bulk water distribution sites come forward? How many people used these sites?
19. Why were bottled water distribution efforts not situated sooner? How much time elapsed between when SAWS saw water quality issues and impacted service and audibles were called to provide neighbors with fresh water?
20. Explain why the boil water notices took so long to be lifted? There should have been better instructions on what the requirements were for the boiled water. For example, tap water could have been used for hand washing but not consumption.
21. Why did certain parts of the City take longer to have the boil water notice lifted compared to others?
22. Are there any protocols that were not executed that should have been to protect SAWS infrastructure during the event?
23. What was the interplay of action and communication between SAWS, CPS and leadership at the EOC during the event?
24. What issues did the chain of command face in responding to the impacted infrastructure and what barriers did leadership face to restoring water services?
25. Please share emails and texts between SAWS and CPSE leadership (CEOs, COOs, board chairs, vice presidents) that were exchanged during the winter storm.
26. At any time during the winter storm, did CPSE request that SAWS not communicate certain information to the public, COSA staff, or City Council?
 1. Please provide copies of written correspondence (emails, texts, etc) that are responsive to this question.
 2. If the communications or requests were made verbally, please describe the communications and identify the person making the requests.

After:

1. What do you think SAWS could have done better to increase communication with our community?
2. Does SAWS have a contingency plan for emergency situations? If so, after it is updated from the lessons learned with this winter storm, will SAWS make it available to the public?
3. Has SAWS reviewed any “lessons learned” studies from previous utility organizations?
4. What new emergency protocols are being considered in the wake of this event?
5. From the perspective of SAWS leadership – If we knew this was going to happen again the same time next year, what would be the one-year plan for preparation? As improbable as this weather recurring in Winter 2022 would be, how can we be prepared for this happening again in a one-year time frame?
6. What weatherization measures can SAWS take to better protect equipment from freezing temperatures? Are there some strategies that could be impactful but have previously been deemed untenable due to costs? What is the true cost of repairs needed to mitigate the risk of future winter-related blackouts?

7. What are the costs to repair vs. the cost to replace any necessary parts needing to be addressed?
8. After the event, how did SAWS communicate to the public what had occurred and how it would affect customers?
9. What measures can SAWS take to better protect equipment from being impacted during outages? What measures, if any, can SAWS take independent of CPSE in this respect? If none, what does SAWS leadership believe CPSE needs to do to keep water infrastructure resilient to outages?
10. Where could SAWS have improved its coordination with COSA and CPS in communications with the public?
11. Why don't the critical pump stations have a backup power system?
12. How much would it cost to equip every pumping station with a generator?
 1. The SA Express article said it would be around \$70 million, SAWS said it would be \$500 to \$800 million.
 2. Would it be feasible to use Federal dollars?
13. How much time and money will it take to weatherize our system?
14. Does SAWS have the available funds to cover the costs associated with this event without increasing rates?
15. Will costs incurred through this crisis affect customer rates in the near future? If so, what are the cost estimates?
16. Where is the money coming from to cover these costs? How much is available?
17. Can ERCOT be deemed liable for any damages caused to SAWS pump stations as a result of the load shedding requests? Is CPSE culpable for these damages in any respect?
18. What type of damages did SAWS infrastructure sustain through this crisis and what are the funding avenues to repair and further prepare equipment for freezing temperatures? Do we need to consider including projects to protect our utilities infrastructure in the next bond package?
19. Will the SAWS program to assist homeowners with broken pipes be fully funded in the next SAWS budget to cover another potential emergency? How much money is in that budget?
20. The video that SAWS put out on how to turn your water off was great. We should have had videos like that on all aspects of weatherizing our personal pipes. Will SAWS make those videos available year-round and have them translated into Spanish as well as American Sign Language?
21. There should have been an instructional video on how to keep sanitation systems operating without running water. Will SAWS make those videos?
22. SAWS should stockpile "long lasting shelf life" water for emergencies such as this. Is this something SAWS would consider?
23. You are the water experts. What are some areas that those without water utility technical expertise may overlook but are essential to addressing to better protect SAWS infrastructure from winter storms and outages?